

What is claimed is:

1. A display apparatus for projecting an image onto an eye's retina of a viewer, comprising:

- 5           a light source for emitting light;  
          a scattering plate for scattering the light from  
the light source;  
          an imaging plate for transmitting the light  
scattered by the scattering plate;  
10          an optical unit with a lens for focusing the  
light transmitted through the imaging plate into an eye of  
the viewer; and  
          mechanism causing the scattering plate to be  
positioned at any place between the light source and the  
15       imaging plate.

2. The display apparatus of claim 1, wherein the scattering  
plate can move continuously between the light source and  
the imaging plate.

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3. A display apparatus for projecting an image onto an eye's retina of a viewer, comprising:

- a light source for emitting light;  
          a scattering plate for scattering the light from  
25       the light source;

an imaging plate for transmitting the light scattered by the scattering plate;

an optical unit with a lens for focusing the light transmitted through the imaging plate into an eye of the viewer; and

a mechanism which allows the scattering plate to position at any one of predetermined plural positions.

4. The display apparatus of claim 1, wherein the light source takes an optically conjugated relationship with a pupil of the viewer.

5. The display apparatus of claim 1, wherein the device is so designed that the light from the light source is focused on or around a pupil of the viewer.

6. The display apparatus of claim 1, wherein the scattering plate takes an optically conjugated relationship with a pupil of the viewer.

7. The display apparatus of claim 1, wherein the device is so designed that the light scattered by scattering plate is focused on or around a pupil of the viewer.

8. The display apparatus of claim 1, wherein the light

source is made of a diode irradiating ultra-violet ray or blue ray and the scattering plate has a fluorescent material for transforming the irradiated ray into white ray.

5 9. The display apparatus of claim 1, wherein the light source is a combination of sub-sources irradiating red, green and blue rays, respectively.

10 10. The display apparatus of claim 1, wherein the light source and the scattering plate is made of an electroluminescent element.

15 11. The display apparatus of claim 1, wherein the scattering plate is so designed that it has a horizontal length which is greater than a vertical length thereof.